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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,358	03/12/2004	Peter R. Werp	5236-000420	6341
28997	7590	01/26/2006	EXAMINER	
HARNES, DICKEY, & PIERCE, P.L.C			BELL, ALLISON S	
7700 BONHOMME, STE 400			ART UNIT	
ST. LOUIS, MO 63105			PAPER NUMBER	
			3737	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/799,358	Applicant(s) WERP ET AL.	
	Examiner Allison S. Bell	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/12/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/20/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 8/20/04 was filed. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeMeester (6,029,081) in view of Cuppen (5,689,190) and Carrozzi (6,346,814).

DeMeester discloses a magnetic navigation system (10) and methods for orienting a magnetically responsive device in an operating region in a subject, the system comprising two main magnet units (22,24) located on opposite sides of the operating region supported by a substantially arcuate arm (26), positionable supporting

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frame (Figure 4A), and control (32) to change the positions of the magnets to maintain and magnetic field. DeMeester discloses that the magnet 22 can be rotated about an axis. DeMeester discloses the first axes of the magnets as being parallel, collinear, and extending through the operating region (Figure 1). DeMeester discloses methods for controlling and coordinating the movement of the positional magnet with the imaging system and wherein the position of the magnets are adjusted as the magnet units move to change the magnetic field (claims 9-14). DeMeester does not show the subject support as being tiltable or liftable, detection and transmission of the magnetic field mounted on opposite sides of the operating region, or both magnets as being individually positionable.

Cuppen discloses a magnetic navigation system (19) with a subject support (45). Cuppen discloses that the patient support can be tilted or lifted (col 1, lines 36-41). Cuppen discloses detection and transmission of the magnetic field mounted on opposite sides of the operating region (col 3, lines 1-3). Cuppen does not disclose both magnets as being individually positionable.

Carrozzi discloses a magnetic resonance imaging system with individually positionable magnets (col 12, lines 16-19). Carrozzi discloses a control (35,36) for a user positioning the magnets with the control lever. Carrozzi discloses that the magnets can be rotated about a transverse plane of the subject, or a plane across the long axis of the region of interest (Figures 14-15). Carrozzi discloses an arcuate track for coordinated movement of the magnets (col 7, lines 32-47), wherein it would be obvious

to have coordinated movement of the magnets that avoided interference between the imaging system and the magnet units.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have combined the magnetic navigation system of Cuppen, including magnetic field controls, with the individually positionable magnets as taught by Corrozzi for the purpose of being able to adjust the magnetic field as needed and manipulate around the object of interest while avoiding interference between the imaging system and magnet units, having the capability of adjusting the magnetic field manually if desired, and allowing for rotation about one axis and pivoting about another axis such that the maximum flexibility and versatility of the apparatus can be achieved.

Claims 19-22,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeMeester (6,029,081) in view of Cuppen (5,689,190), Carrozzi (6,346,814), and Damadian (6,346,816). The modified invention of DeMeester describes the invention substantially as claimed except for the magnetic field being determined based on a lookup table.

Damadian (6,346,816) discloses a method for magnetic resonance imaging wherein the magnetic field is determined from a lookup table (col 16, lines 5-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the modified magnetic navigation system and methods of DeMeester with the methods of Damadian for adjusting the magnetic field based on a lookup table for the purpose of adjusting parameters based on known data.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeMeester (6,029,081) in view of Cuppen (5,689,190), Carrozzi (6,346,814), Damadian (6,346,816), and Hillenbrand (4,949,043). The modified invention of DeMeester describes the invention substantially as claimed except for the method involving determining the magnetic field based on a mathematical model.

Hillenbrand discloses a method for determination of a magnetic field based on a mathematical model (col 3, lines 23-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the modified magnetic navigation system and methods of DeMeester with the methods of Hillenbrand such that the magnetic field is determined from a mathematical model for the purpose of creating desired shimming and field homogeneity results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allison S. Bell whose telephone number is 571-272-2768. The examiner can normally be reached on Monday - Friday, 8.30 am - 4.30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASB

A handwritten signature in black ink, appearing to read 'Ali Imam', with a long horizontal flourish extending to the right.

ALI IMAM
PRIMARY EXAMINER